

SEQUENCE LISTING

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 TSUKAHARA, Tomohide
 NABETA, Yuki
 KAWAGUCHI, Satoshi
 IKEDA, Hideyuki
 WADA, Takuro
 YAMASHITA, Toshihiko

<120> TUMOR ANTIGEN PROTEIN AND USE THEREOF

<130> 0020-5360PUS1

<140> US 10/529,000

<141> 2005-03-24

<150> PCT/JP03/12037

<151> 2003-09-19

<150> JP 2002-282345

<151> 2002-09-27

<160> 55

<170> PatentIn Ver. 2.1

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 Ser Phe Gln Ile Pro Val Ser Pro His Ile
 1 5 10

 <210> 31
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic peptide derived from SEQ ID NO: 2 that can
 be recognized by CTLs when bound to HLA-A24 antigen

 <400> 31
 Val Tyr Val Trp Tyr Gly Gly Gln Glu Cys
 1 5 10

 <210> 32
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic peptide derived from SEQ ID NO: 2 that can
 be recognized by CTLs when bound to HLA-A24 antigen

 <400> 32
 Val Thr Val Trp Leu Leu Glu Gln Lys Leu
 1 5 10

 <210> 33
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic peptide derived from SEQ ID NO: 2 that can
 be recognized by CTLs when bound to HLA-A24 antigen

 <400> 33
 Trp Met Glu Gly Gln Val Thr Val Trp Leu
 1 5 10

 <210> 34
 <211> 10
 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide derived from SEQ ID NO: 2 that can be recognized by CTLs when bound to HLA-A24 antigen

<400> 34

Arg Trp Lys Lys Ala Cys Gln Arg Phe Leu
1 5 10

<210> 35

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide derived from SEQ ID NO: 2 that can be recognized by CTLs when bound to HLA-A24 antigen

<400> 35

Leu Pro Leu Ser Ala Leu Pro Pro Pro Leu
1 5 10

<210> 36

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide derived from SEQ ID NO: 2 that can be recognized by CTLs when bound to HLA-A24 antigen

<400> 36

Val Gly Ile Lys Arg His Val Lys Ala Leu
1 5 10

<210> 37

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide derived from SEQ ID NO: 2 that can be recognized by CTLs when bound to HLA-A24 antigen

<400> 37

Asn Ser Val Lys Val Met Tyr Lys Cys Leu
1 5 10

<210> 38

<211> 10

<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic peptide derived from SEQ ID NO: 2 that can
be recognized by CTLs when bound to HLA-A24 antigen

<400> 38
Gln Gly Pro Cys Pro Gln Ala Pro Pro Leu
1 5 10

<210> 39
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide derived from SEQ ID NO: 2 that can
be recognized by CTLs when bound to HLA-A24 antigen

<400> 39
Ile Gln Ala Asp His Ala Tyr Gln Ala Leu
1 5 10

<210> 40
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide derived from SEQ ID NO: 2 that can
be recognized by CTLs when bound to HLA-A24 antigen

<400> 40
Met Met Ala Ala Met Val Leu Thr Ser Leu
1 5 10

<210> 41
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide derived from SEQ ID NO: 2 that can
be recognized by CTLs when bound to HLA-A24 antigen

<400> 41
Ile Tyr Thr Ser Val Ser Trp Ala Ala Ala
1 5 10

<210> 42
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide derived from SEQ ID NO: 2 that can
be recognized by CTLs when bound to HLA-A24 antigen

<400> 42
Val Tyr Gly Ile Glu His Arg Asp Gln Trp
1 5 10

<210> 43
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide derived from SEQ ID NO: 2 that can
be recognized by CTLs when bound to HLA-A24 antigen

<400> 43
Ser Leu Ser Pro Val Arg Ser Arg Ser Leu
1 5 10

<210> 44
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide derived from SEQ ID NO: 2 that can
be recognized by CTLs when bound to HLA-A24 antigen

<400> 44
Ala Ala Ala Pro Ser Ala Ala Cys Ser Leu
1 5 10

<210> 45
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide derived from SEQ ID NO: 2 that can
be recognized by CTLs when bound to HLA-A24 antigen

<400> 45
Gln Pro Ala Pro Ala Met Lys Ser His Leu
1 5 10

<210> 46
<211> 12
<212> PRT
<213> Artificial Sequence

<220>

<223> HLA-B55-restricted tumor antigen peptide

<400> 46

Cys Thr Ala Cys Arg Trp Lys Lys Ala Cys Gln Arg
1 5 10

<210> 47

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> A synthetic peptide that can be recognized by CTLs when bound to HLA-B55 antigen

<400> 47

Cys Thr Ala Cys Arg Trp Lys Lys Ala
1 5

<210> 48

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> A synthetic peptide that can be recognized by CTLs when bound to HLA-B55 antigen

<400> 48

Thr Ala Cys Arg Trp Lys Lys Ala Cys
1 5

<210> 49

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> A synthetic peptide that can be recognized by CTLs when bound to HLA-B55 antigen

<400> 49

Ala Cys Arg Trp Lys Lys Ala Cys Gln
1 5

<210> 50

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> A synthetic peptide that can be recognized by CTLs when bound to HLA-B55 antigen

<400> 50
Cys Arg Trp Lys Lys Ala Cys Gln Arg
1 5

<210> 51
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> A synthetic peptide that can be recognized by CTLs when bound to
HLA-B55 antigen

<400> 51
Cys Thr Ala Cys Arg Trp Lys Lys Ala Cys
1 5 10

<210> 52
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> A synthetic peptide that can be recognized by CTLs when bound to
HLA-B55 antigen

<400> 52
Thr Ala Cys Arg Trp Lys Lys Ala Cys Gln
1 5 10

<210> 53
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> A synthetic peptide that can be recognized by CTLs when bound to
HLA-B55 antigen

<400> 53
Ala Cys Arg Trp Lys Lys Ala Cys Gln Arg
1 5 10

<210> 54
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> A synthetic peptide that can be recognized by CTLs when bound to
HLA-B55 antigen

<400> 54
Cys Thr Ala Cys Arg Trp Lys Lys Ala Cys Gln
1 5 10

<210> 55
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> A synthetic peptide that can be recognized by CTLs when bound to
HLA-B55 antigen

<400> 55
Thr Ala Cys Arg Trp Lys Lys Ala Cys Gln Arg
1 5 10